

*WHAT IS CLAIMED IS:*~~CLAIMS~~

1. A suction tube for drawing powder containing medicament from a blister (12) comprising a cavity (19) sealed by a covering film (37), the suction tube comprising an elongate body (62) which includes an inlet section (63) at one end thereof, which inlet section (63) includes an inlet (65) and a cutting assembly (64) comprising a cutting blade (127) which includes a cutting edge (133) for making a cut in the covering film (37) of a blister (12) and at least one ram blade (129, 131) which includes a bearing surface (129', 131') for bearing on the covering film (37) of the blister (12) and pushing the same into the cavity (19) of the blister (12), an outlet section (67) at the other end thereof, which outlet section (67) includes an outlet (69) and provides a mouthpiece, and an inhalation channel (71) providing fluid communication between the inlet (65) and the outlet (69) through which powder is in use drawn on inhalation by a user.
2. The suction tube according to claim 1, wherein the cutting edge (133) of the cutting blade (127) extends axially forward of the bearing surface (129', 131') of the at least one ram blade (129, 131) such that the covering film (37) of a blister (12) is at least partly cut by the cutting blade (127) before the bearing surface (129', 131') of the at least one ram blade (129, 131) contacts the covering film (37) of the blister (12).
3. The suction tube according to claim 2, wherein the cutting blade (127) is disposed axially forward of the bearing surface (129', 131') of the at least one ram blade (129, 131) such that the covering film (37) of a blister (12) is cut by the cutting blade (127) before the bearing surface (129', 131') of the at least one ram blade (129, 131) contacts the covering film (37) of the blister (12).
4. The suction tube according to any of claims 1 to 3, wherein the cutting blade (127) extends across the inlet (65).

5. The suction tube according to any of claims 1 to 4, wherein the inlet (65) is substantially co-axial with the longitudinal axis of the body (62).
6. The suction tube according to any of claims 1 to 5, wherein the cutting blade (127) is substantially co-axial with the longitudinal axis of the body (62).
7. The suction tube according to any of claims 1 to 6, wherein the cutting blade (127) includes at least one cutting point (127c).
8. The suction tube according to claim 7, wherein the cutting blade (127) includes first and second sections (127a, 127b) which taper to a cutting point (127c).
9. The suction tube according to any of claims 1 to 8, wherein the cutting blade (127) includes at least one transverse opening (134) axially rearward of the cutting edge (133) thereof.
10. The suction tube according to any of claims 1 to 9, wherein the cutting blade (127) is substantially planar.
11. The suction tube according to any of claims 1 to 10, wherein each ram blade (129, 131) includes at least one transverse opening (141, 143).
12. The suction tube according to claim 11, wherein the at least one transverse opening (141, 143) is axially rearward of the bearing surface (129', 131') of the ram blade (129, 131).
13. The suction tube according to claim 11, wherein the at least one transverse opening (141, 143) extends axially rearwardly from the bearing surface (129', 131') of the ram blade (129, 131).

14. The suction tube according to any of claims 11 to 13, wherein the at least one transverse opening (141, 143) is asymmetrically located in the ram blade (129, 131).
15. The suction tube according to claim 14, wherein the at least one ram blade (129, 131) is substantially planar.
16. The suction tube according to any of claims 1 to 15, wherein the inlet section (63) includes supplementary air inlet openings (147, 149) into the inhalation channel (71) at an axial position rearwardly adjacent the inlet (65).
17. The suction tube according to any of claims 1 to 16, wherein the cutting assembly (64) includes first and second ram blades (129, 131) disposed on opposite sides of the cutting blade (127).
18. The suction tube according to claim 17, wherein each ram blade (129, 131) is disposed substantially the same radial distance from the cutting blade (127).
19. The suction tube according to claim 17 or 18, wherein the cutting assembly (64) is configured such that the distance between the endmost points of the bearing surface (129', 131') of each of the ram blades (129, 131) is approximately the same distance as the distance between the endmost points of the effective cutting length of the cutting blade (127) and the adjacent endmost points of the bearing surface (129', 131') of each of the ram blades (129, 131).
20. The suction tube according to any of claims 1 to 19, wherein the axial position of the inlet (65) is such that when the inlet section (63) is located in a blister (12) the inlet (65) is located below the surface defining the opening of the cavity (19) of the blister (12).

21. The suction tube according to any of claims 1 to 20, wherein the inlet section (63) includes at least one surface (117', 119') which defines a shoulder which in use is located at the upper surface of the blister (12).
22. An inhaler for administering dry powder by inhalation, comprising the suction tube (7) according to any of claims 1 to 21.
23. The inhaler according to claim 22, further comprising a support unit (1) for supporting a blister pack element (11), wherein the support unit (1) includes a wall member (85) which includes a plurality of openings (87) adjacent which the blister pack element (11) is in use disposed such that a blister (12) is located beneath each opening (87).
24. The inhaler according to claim 23, wherein the inlet section (63) of the suction tube (7) includes at least one surface (115') which defines a shoulder that acts to limit the extent to which the suction tube (7) can be inserted into the openings (87) in the wall member (85).
25. The inhaler according to claim 23 or 24, wherein the openings (87) in the wall member (85) of the support unit (1) each include at least one radial extension (87a, 87b) which each include a web member (89) and the inlet section (63) of the suction tube (7) includes at least one resiliently-biased arm (105, 107) which supports a catch member (109, 111) and is configured to fit into the at least one radial extension (87a, 87b) of the openings (87) in the wall member (85), with the catch member (109, 111) and the web member (89) being configured to engage one another when the suction tube (7) is inserted into one of the openings (87) in the wall member (85).
26. The inhaler according to claim 25, wherein the openings (87) in the wall member (85) of the support unit (1) each include first and second radial extensions (87a, 87b) and the inlet section (63) of the suction tube (7) includes first and second resiliently-biased arms (105, 107).

27. The inhaler according to claim 26, wherein the first and second radial extensions (87a, 87b) of the openings (87) in the wall member (85) and the first and second arms (105, 107) of the inlet section (63) of the suction tube (7) are radially opposed.

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B3*

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